CLAIMS:

1. A power converter comprising:

a semiconductor circuit including a first semiconductor device and a second semiconductor device each having a main terminal and a control terminal, and electrically connected to each other;

a main circuit wiring including a plurality of tabular conductors arranged at least partially in superposed relation to each other, a main circuit current of said semiconductor circuit flowing in said main circuit wiring;

a first control signal line for supplying a first control signal to said control terminal of said first semiconductor switching device; and

a second control signal line for supplying a second control signal to said control terminal of said second semiconductor switching device;

wherein the sum of the length of that portion of each of said first control signal line and said second control signal line which is opposite to an area of said main circuit wiring where said main circuit current flows and where said plurality of said tabular conductors are in superposed relation to each other, the length of that portion of each of said first control signal line and said second control signal line in opposite relation to an area of said main circuit wiring where said main circuit current does not flow, and the length of that portion of each of said first

control signal line and said second control signal line which is located outside an end of said main circuit wiring, is substantially equal to the total wiring length of each of said first control signal line and said second control signal line.

2. A power converter according to Claim 1, wherein said first semiconductor switching device and said second semiconductor switching device are connected in parallel to each other.

3. A power converter according to Claim 1, wherein said first semiconductor switching device and said second semiconductor switching device are connected in series to each other.

4. A power converter according to Claim 1, wherein respective junction between each of said first and second control signal lines and the circuit portion of said semiconductor circuit is in opposite relation to selected one of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation with each other and an area of said main circuit wiring where said main circuit current does not flow, said junction being alternatively located outside an end of said main circuit wiring.

5. A power converter according to Claim 2, wherein respective junction between each of said first and second control signal lines and the

circuit portion of said semiconductor circuit is in opposite relation to selected one of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation with each other and an area of said main circuit wiring where said main circuit current does not flow, said junction being alternatively located outside an end of said main circuit wiring.

6. A power converter according to Claim 3, wherein respective junction between each of said first and second control signal lines and the circuit portion of said semiconductor circuit is in opposite relation to selected one of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation with each other and an area of said main circuit wiring where said main circuit current does not flow, said junction being alternatively located outside an end of said main circuit wiring.

7. A power converter according to Claim 1, wherein that portion of each of said first and second control signal lines which is in opposite relation to only one of said tabular conductors with said main circuit current flowing therein, is formed of selected one of a twisted wire and a shielded wire.

8. A power converter according to Claim 2,

wherein that portion of each of said first and second control signal lines which is in opposite relation to only one of said tabular conductors with said main circuit current flowing therein, is formed of selected one of a twisted wire and a shielded wire.

9. A power converter according to Claim 3,

wherein that portion of each of said first and second control signal lines which is in opposite relation to only one of said tabular conductors with said main circuit current flowing therein, is formed of selected one of a twisted wire and a shielded wire.

10. A power converter according to Claim 2,

wherein the length of that portion of each of said first and second control signal lines which is in opposite relation to an area of said main circuit wiring where said main circuit current flows and where said plurality of said tabular conductors are in superposed relation to each other, is substantially equal to the total length of the corresponding one of said first and second control signal lines.

11. A power converter according to Claim 3,

wherein the length of that portion of said first control signal line which is in opposite relation to an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation to each other, is substantially equal to the total length of said first control signal line, and

wherein the sum of the length of that portion of said second control signal line which is in opposite relation to an area of said main circuit wiring where said main circuit current does not flow and the length of that portion of said second control signal line which is located outside an end of said main circuit wiring, is substantially equal to the total length of said second control signal line.

12. A power converter comprising:

a semiconductor circuit including a first semiconductor switching device and a second semiconductor switching device each having a main terminal and a control terminal, and electrically connected to each other;

a main circuit wiring including a plurality of tabular conductors arranged at least in partially superposed relation with each other, a main circuit current of said semiconductor circuit flowing in said main circuit wiring;

a first control signal line for supplying a first control signal to said control terminal of said first semiconductor switching device; and

a second control signal line for supplying a second control signal to said control terminal of said second semiconductor switching device;

wherein respective junction between each of said first and second control signal lines and the circuit portion of said semiconductor circuit is in

opposite relation to selected one of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation to each other and an area of said main circuit wiring where said main circuit current does not flow, said junction being alternatively located outside an end of said main circuit wiring; and

wherein that portion of each of said first and second control signal lines which is in opposite relation to only one of said tabular conductors with said main circuit current flowing therein, is constituted of selected one of a twisted wire and a shielded wire.

13. A power converter comprising:

a semiconductor circuit including first and second semiconductor switching devices each having a main terminal and a control terminal and electrically connected in parallel to each other, and third and fourth semiconductor switching devices each having a main terminal and a control terminal and electrically connected in parallel to each other, said first parallel circuit including said first and second semiconductor switching devices and said second parallel circuit including said third and fourth semiconductor switching devices being electrically connected in series to each other;

a main circuit wiring including a plurality

of tabular conductors arranged at least in partially superposed relation to each other, a main circuit current of said semiconductor circuit flowing in said main circuit wiring; and

first, second, third and fourth control signal lines for supplying a control signal to said control terminals of said first, second, third and fourth semiconductor switching devices, respectively;

wherein the length of that portion of each of said first and second control signal lines which is in opposite relation to an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation with each other, is substantially equal to the total length of the corresponding one of said first and second control signal lines; and

wherein the sum of the length of that portion of each of said third and fourth control signal lines which is in opposite relation to an area of said main circuit wiring where said main circuit current does not flow and the length of that portion of the corresponding one of said third and fourth control signal lines which is located outside an end of said main circuit wiring, is substantially equal to the total length of said corresponding one of said third and fourth control signal lines.

14. A power converter comprising:

a semiconductor circuit including a

semiconductor switching device having a main terminal and a control terminal;

a main circuit wiring including a plurality of tabular conductors arranged at least in partially superposed relation to each other, the main circuit current of said semiconductor circuit flowing in said main circuit wiring; and

a control signal line for supplying a control signal to said control terminal of said semiconductor switching device;

wherein the sum of the length of that portion of said control signal line which is in opposite relation to an area of said main circuit wiring where said main circuit current flows and where said plurality of said tabular conductors are in superposed relation with each other, the length of that portion of said control signal line which is in opposite relation to an area of said main circuit wiring where said main circuit current does not flow, and the length of that portion of said control signal line which is located outside an end of said main circuit wiring, is substantially equal to the total wiring length of said control signal line, and

wherein that portion of said control signal line which is in opposite relation to only one of said tabular conductors in which said main circuit current flows, is formed of selected one of a twisted wire and a shielded wire.

15. A power converter comprising:

a semiconductor circuit including a semiconductor switching device having a main terminal and a control terminal;

a main circuit wiring including a plurality of tabular conductors arranged at least in partially superposed relation to each other, the main circuit current of said semiconductor circuit flowing in said main circuit wiring; and

a control signal line for supplying a control signal to said control terminal of said semiconductor switching device;

wherein each junction between said control signal line and the circuit portion of said semiconductor circuit is in opposite relation to selected one of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation with each other and an area of said main circuit wiring where said main circuit current does not flow, said junction being alternatively located outside an end of said main circuit wiring, and

wherein the portion of said control signal line which is in opposite relation to only one of said tabular conductors in which the main circuit current flows, is formed of selected one of a twisted wire and a shielded wire.

16. A power converter comprising:

a semiconductor circuit including a semiconductor switching device having a main terminal and a control terminal;

a main circuit wiring including a plurality of tabular conductors arranged at least in partially superposed relation to each other, the main circuit current of said semiconductor circuit flowing in said main circuit wiring; and

a control signal line for supplying a control signal to said control terminal of said semiconductor switching device;

wherein said control signal line crosses an end of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation to each other, between the side of said main circuit wiring where said semiconductor switching device is located and the opposite side of said main circuit wiring.